

Form PTO-1449 (Rev. 2-32)		U.S. Department of Commerce Patent & Trademark Office		Atty. Docket No. A8681	Serial No. <u>10/721,343</u> <u>Not Yet Assigned</u>	
<b>INFORMATION DISCLOSURE STATEMENT</b> (Use several sheets if necessary)		Applicant: Lester F. LUDWIG, et al.				
		Filing Date: November 1, 2000	Group: <u>Not Yet Assigned</u> 2152			
U.S. PATENT DOCUMENTS						
Examiner Initial	Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
	3,723,653	3/27/73	Tatsuzawa	—	—	
	3,873,771	3/25/75	Kleinerman et al.	—	—	
	3,974,337	8/10/76	Tatsuzawa	—	—	
	4,005,265	1/25/77	Verhoeckx, et al.	—	—	
	4,054,908	10/18/77	Poirier et al.	—	—	
	4,210,927	7/1/80	Yumde, et al.	—	—	
	4,441,180	4/3/84	Schussler, et al.	—	—	
	4,451,705	5/29/84	Burke et al.	—	—	
	4,475,193	10/2/84	Brown	—	—	
	4,516,156	5/7/85	Fabris, et al.	—	—	
	4,529,839	7/16/85	Colton, et al.	—	—	
	4,529,840	7/16/85	Colton et al.	—	—	
	4,531,024	7/23/85	Colton, et al.	—	—	
	4,574,374	3/4/86	Scordo	—	—	
	4,645,872	2/4/87	Pressman, et al.	—	—	
FOREIGN PATENT DOCUMENTS						
	Document	Date	Country	Class	Sub-class	Translation Yes/No
	0 041 902	12/16/81	EP	—	—	
	0 190 060	8/6/86	EP	—	—	
	0 354 370	2/14/90	EP	—	—	
	35 07 152	8/29/85	DE	—	—	
	0 403 118	12/19/90	EP	—	—	
	0 414 222	2/27/91	EP	—	—	
	0 436 345	7/10/91	EP	—	—	
	0 453 128	10/23/91	EP	—	—	
	0 497 022	8/5/92	EP	—	—	
	0 516 371	12/2/92	EP	—	—	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)						
	Videomatic Switching: Systems and Services, C. Crawford, F. Milone, D. Zoppellaro, Digital Communications, 1988 International Zurich Seminar.					
	Marskak, Ronni T. "Beyond Mail for Windows – epitomizing the mail-enabled application", Patricia Seybold's Office Computing Report, Sept. 1992 v15 n9. (full text copy from Computer Select 1992 CD).					
	Rangan et al. "Software Architecture for Integration of Video Services in the Etherphone System," IEEE Journal on Selected Area of Communications, v9 n9, Dec. 1991, pp. 1395-1404.					
	ACM Press, Conference on Organizational Computing Systems, SIGOIS Bulletin, Vol. 12, No. 2-3, Nov. 5-8, 1991.					
	The American Users Forum (Niu-Forum) Aug 6-9, 1990.					
EXAMINER:	D. DM	DATE CONSIDERED: 7/6/03				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication.						

Form PTO-1449 (Rev. 2-32)		U.S. Department of Commerce Patent & Trademark Office		Atty. Docket No. A8681	Serial No. 10   721,343 Not Yet Assigned		
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicant: Lester F. LUDWIG, et al.					
		Filing Date: November 1, 2000		Group: Not Yet Assigned 2152			
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
		4,650,929	3/17/87	Boerger et al.	—	—	
		4,653,090	3/24/87	Hayden	—	—	
		4,686,698	8/11/87	Tompkins et al.	—	—	
		4,710,917	12/1/87	Tomkins, et al.	—	—	
		4,716,585	12/29/87	Tompkins et al.	—	—	
		4,796,293	1/3/89	Blinken et al.	—	—	
		4,817,018	3/28/89	Cree et al.	—	—	
		4,837,798	6/6/89	Cohen, et al.	—	—	
		4,847,829	7/11/89	Tompkins et al.	—	—	
		4,888,795	12/19/89	Ando et al.	—	—	
		4,922,523	5/1/90	Hashimoto	—	—	
		4,931,872	6/5/90	Stoddard et al.	—	—	
		4,953,159	8/28/90	Hayden et al.	—	—	
		4,961,211	10/2/90	Tsugane, et al.	—	—	
		4,965,819	10/23/90	Kannes	—	—	
FOREIGN PATENT DOCUMENTS							
		Document	Date	Country	Class	Sub-class	Translation Yes/No
		0 523 618	1/20/93	EP	—	—	
		0 535 601	4/7/93	EP	—	—	
		0 523 626	1/20/93	EP	—	—	
		0 548 597	6/30/93	EP	—	—	
		0 561 381	9/22/93	EP	—	—	
		0 604 053	6/29/94	EP	—	—	
		WO 94/24803	10/27/94	PCT	—	—	
		WO 92/21211	11/26/92	PCT	—	—	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		Bellcore News, "IMAL Makes Media Merging Magic," 5(20), Nov. 9, 1988.					
		Frontiers in computer communications technology, Sigcom '87 Workshop (Aug. 11-13, 1987)					
		Unix 4 <sup>th</sup> Berkeley Release 1991 man pages for 'login,' 'htmp,' 'talk,' and 'who.' Online Internet: <a href="http://www.de.freebsd.org">http://www.de.freebsd.org</a> .					
		Statement by Attorney for Applicants-Describing Product Development.					
		AHUJA et al., "Coordination and Control of Multimedia Conferencing," IEEE Communication Magazine, 30(5): 38-42, May 1992.					
		AHUJA et al., "Networking Requirements of the Rapport Multimedia Conferencing System," INFOCOM '88, IEEE, pp. 746-751, 1988.					
		BISWAS et al., "Distributed Scheduling of Meetings: A Case Study in Prototyping Distributed Application," System Integration, 1992 2 <sup>nd</sup> International Conference.					
EXAMINER: <i>D. DINA</i>			DATE CONSIDERED: 7/6/05				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication.							

Form PTO-1449 (Rev. 2-32)		U.S. Department of Commerce Patent & Trademark Office	Atty. Docket No. A8681	Serial No. <u>10/721,343</u> <u>Not Yet Assigned</u>			
<b>INFORMATION DISCLOSURE STATEMENT</b> (Use several sheets if necessary)		Applicant: Lester F. LUDWIG, et al.					
		Filing Date: November 1, 2000	Group: <u>Not Yet Assigned</u>	2152			
<b>U.S. PATENT DOCUMENTS</b>							
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
		4,977,520	12/11/90	McGauhey et al.	1	1	
		4,987,492	1/22/91	Stults, et al.	1	1	
		4,995,071	2/19/91	Weber, et al.	1	1	
		4,998,243	3/5/91	Kao	1	1	
		5,003,532	3/26/91	Ashida, et al.	1	1	
		5,010,399	4/23/91	Goodman, et al.	1	1	
		5,014,267	5/7/91	Tompkins et al.	1	1	
		5,027,400	6/25/91	Baji, et al.	1	1	
		5,042,062	8/20/91	Lee, et al.	1	1	
		5,056,136	10/8/91	Smith	1	1	
		5,072,442	12/10/91	Todd	1	1	
		5,073,926	12/17/91	Suzuki et al.	1	1	
		5,099,510	3/24/92	Blinken, Jr., et al.	1	1	
		5,130,399	7/14/92	Ikeno et al.	1	1	
		5,130,793	7/14/92	Bordry, et al.	1	1	
<b>FOREIGN PATENT DOCUMENTS</b>							
		Document	Date	Country	Class	Sub-class	Translation Yes/No
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
		COHEN et al., "Audio Windows: User Interface for Manipulating Virtual Acoustic Environments," pp. 479-480.					
		COHEN et al., "Audio Windows for Binaural Telecommunication," EIC, Tokyo (10/91)					
		COHEN et al., Design and Control of Shared Conferencing Environments for Audio Telecommunication," Proceedings of the Second Int'l Symposium on Measurement and Control Robotics (ISMCR '92), Tsukuba Science City, Japan, (November 15-19, 1992), pp. 405-412.					
		COHEN et al., "Exocentric Control of Audio Imaging in Binaural Telecommunication," IEICE Trans. Fundamentals, Vol. E75-A, No. 2, (February 1992).					
		COHEN et al., "Multidimensional Audio Window Management," Int'l Journal of Man-Machine Studies, Vol. 34:319-336 (1991).					
		COHEN et al., "Multidimensional Audio Windows: Conference, Concerts and Cocktails," Human Factors Society Meeting, SF, CA, pp. 1-15, June 12, 1991.					
		ENSOR et al., "The Rapport Multimedia Conferencing System - Software Overview," Computer Workstation Conference, IEEE, pp. 52-58, 1988.					
		GOPAL et al., "Directories of Networks with Causally Connected Users," IEEE, pp. 1060-1064, 1988.					
		HORN et al., "An ISDN Multimedia Conference Bridge," TENCON '90 - 1990 IEEE Region 10 Conference on Computer and Communication, pp. 853-856, 1990.					
EXAMINER:	P. D. M.		DATE CONSIDERED: 7/6/00				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication.							

Form PTO-1449 (Rev. 2-32)	U.S. Department of Commerce Patent & Trademark Office	Atty. Docket No. A8681	Serial No. <u>10/721,343</u> Not Yet Assigned
<b>INFORMATION DISCLOSURE STATEMENT</b> (Use several sheets if necessary)		Applicant: Lester F. LUDWIG, et al.	
		Filing Date: November 1, 2000	Group: Not Yet Assigned <u>Z152</u>

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
	5,130,801	7/14/92	Yamaguchi			
	5,155,761	10/13/92	Hammond			
	5,157,491	10/20/92	Kassatly			
	5,170,427	12/8/92	Guichard, et al.			
	5,195,086	3/16/93	Baumgartner et al.	345	329	
	5,195,087	3/16/93	Bennett et al.			
	5,200,989	4/6/93	Milone			
	5,202,828	4/93	Vertelney et al.	345	326	
	5,202,957	4/13/93	Serrao			
	5,218,627	6/8/93	Corey, et al.			
	5,224,094	6/29/93	Maher et al.			
	5,231,492	7/27/93	Dangi et al.			
	5,239,466	8/24/93	Morgan et al.			
	5,253,362	10/12/93	Nolan et al.			
	5,260,941	11/9/93	Wilder et al.			

**FOREIGN PATENT DOCUMENTS**

	Document	Date	Country	Class	Sub-class	Translation Yes/No

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	KAMEL, "An Integrated Approach to Share Synchronous Groupware Workspaces," IEEE 1993.
	KENDALL et al., "Simulating the Cue of Spatial Hearing in Natural Environments," Northwestern University, Evanston, IL 60201.
	KLEIN, Telekommunikation von Angesicht zu Angesicht 2323 Telecom Report 9 (1986) Sept./Okt., No. 5, Erlangen, W. Germany.
	KOBAYASHI et al., "Development and Trial Operation of Video Teleconference System," IEEE Globecom, pp. 2060-2063, 1999.
	LAKE et al., "A Network Environment for Studying Multimedia Network Architecture and Control," (1989 Globecom).
	LANTZ, An Experiment in Integrated Multimedia Conferencing, Department of Computer Science, Stanford University, Stanford, CA 94305, Dec. 1986.
	LANTZ et al., Collaboration Technology Research at Olivetti Search California, August 1989.
	LAUWERS et al., Replicated Architecture for Shared Window Systems: A Critique, (Olivetti Research California) Version of April 1990.
	LAUWERS et al., Collaboration Awareness in Support of Collaboration Transparency: Requirements for the Next Generation of Shared Windows Systems, (Olivetti Research California) Version of April 1989.
	LEUNG et al., Optimum Connection Paths for a Class of Videoconferences, Department of Information Engineering, the Chinese University of Hong Kong, Shatin, Hong Kong.

EXAMINER:

D. DIAH

DATE CONSIDERED:

7/6/00

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

Form PTO-1449 (Rev. 2-32)		U.S. Department of Commerce Patent & Trademark Office		Atty. Docket No. A8681	Serial No. <i>10/2 721,343</i> <del>Not Yet Assigned</del>		
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				Applicant: Lester F. LUDWIG, et al.			
				Filing Date: November 1, 2000	Group: <del>Not Yet Assigned</del>		<i>2152</i>
<b>U.S. PATENT DOCUMENTS</b>							
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
<i>J</i>		5,283,637	2/1/94	Goolcharan			
		5,303,343	4/12/94	Ohya et al.			
		5,315,633	5/24/94	Champa			
		5,319,795	6/7/94	Hamabe et al.			
		5,333,133	7/26/94	Andrews et al.			
		5,333,299	7/26/94	Kovai et al.			
		5,335,321	8/2/94	Harney et al.			
		5,345,258	9/6/94	Matsubara et al.			
		5,351,276	9/27/94	Doll Jr. et al.			
		5,353,398	10/4/94	Kitahara et al.			
		5,363,507	11/8/94	Nakayama et al.			
		5,365,265	11/15/94	Shibata et al.			
		5,367,629	11/22/94	Chu et al.			
		5,373,549	12/13/94	Bales et al.			
		5,374,952	12/20/94	Flohr			
<b>FOREIGN PATENT DOCUMENTS</b>							
		Document	Date	Country	Class	Sub-class	Translation Yes/No
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
<i>J</i>		MAENO et al., Distributed Desktop Conferencing System (MERMAID) Based on Group Communication Architecture, The Transactions of the Institute of Electronics, Information and Comm. Engineers E74 (1991) Sept., No. 9, Tokyo, JP					
		MARTENS, "Principal Components Analysis and Resynthesis of Spectral Cues to Perceived Direction," Proceedings of the 1987 Int'l Computer Music Conference, Northwestern University, Evanston, IL 60201					
		MASAKI et al., "A Desktop Teleconferencing Terminal Based on B-ISDN: PMTC," NTT Review, 4(4):81-85, 1992					
		NG et al., Systems Integration '90, (April 23-26, 1990).					
		NUNOKAWA et al., "Teleconferencing Using Stereo Voice and Electronic OHP," IEEE, 1988.					
		OHMORI et al., "Distributed Cooperative Control for Sharing Applications Based on Multiparty and Multimedia Desktop Conferencing System," IEEE, 1992.					
		PATE, "Trends in Multimedia Applications and the Network Models to Support Them," Globecom's 90: 1990.					
		PERKINS, "Spider: An investigation in collaborative technologies and their effects on network performance".					
<i>J</i>		RAMANATHAN et al., Optimal Communication Architectures for Multimedia Conferencing in Distributed Systems, Multimedia Laboratory Dept. of Computer Science and Engineering, University of San Diego, La Jolla, CA.					
EXAMINER: <i>D. D. M.</i>			DATE CONSIDERED: <i>7/6/01</i>				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication.							

Form PTO-1449 (Rev. 2-32)		U.S. Department of Commerce Patent & Trademark Office	Atty. Docket No. A8681.	Serial No. <u>10721,343</u> <u>Not Yet Assigned</u>			
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicant: Lester F. LUDWIG, et al.					
		Filing Date: November 1, 2000	Group: <u>Not Yet Assigned</u>	2152			
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
		5,375,068	12/20/94	Palmer et al.			
		5,379,374	1/3/95	Ishizaki et al.			
		5,382,972	1/17/95	Kannes			
		5,384,598	1/24/95	Rodriguez et al.			
		5,384,772	1/24/95	Marshall			
		5,392,223	2/21/95	Caci			
		5,392,346	2/21/95	Hassler et al.			
		5,404,435	4/4/95	Rosenbaum			
		5,408,526	4/18/95	McFarland, et al.			
		5,408,662	4/18/95	Katsurabayashi			
		5,422,883	6/6/95	Hauris et al.			
		5,432,525	7/11/95	Maruo et al.			
		5,444,476	8/22/95	Conway			
		5,471,318	11/28/95	Ahuja et al.			
		5,473,679	12/5/95	La Porta et al.			
FOREIGN PATENT DOCUMENTS							
		Document	Date	Country	Class	Sub-class	Translation Yes/No
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		RANGAN et al., "Software architecture for integration of video services in the etherphone system," IEEE J. on Selected Areas in Comm., 9(9) :1395-1404, Dec. 91.					
		RANGAN et al., "A Window-Based Editor for Digital Video and Audio," System Sciences, 1992 Hawaii Int'l Conference (1992).					
		SAKATA, "B-ISDN Multimedia Workstation Architecture," IEEE, 1993.					
		SAKATA et al., "Development and Evaluation of an In-House Multimedia Desktop Conference System," NEC Research & Development, no. 98, pp. 107-117, July 1990.					
		STEFIK et al., "Beyond the Chalkboard: Computer Support for Collaboration and Problem Solving," Communications of the ACM, Vol. 30, No. 1, Jan. 1987.					
		VIN et al., Hierarchical Conferencing Architectures for Inter-Group Multimedia Collaboration, Multimedia Laboratory Department of Computer Science and Engineering University of California at San Diego, La Jolla.					
		VIN et al., Multimedia Conferencing in the Etherphone Environment, Computer Magazine, Vol. 24, Issue 10, pp. 69-79, 1991.					
EXAMINER:		DATE CONSIDERED: 7/6/05					
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication.							

Form PTO-1449 (Rev. 2-32)		U.S. Department of Commerce Patent & Trademark Office	Atty. Docket No. A8681	Serial N. <u>101721,343</u> <u>Not Yet Assigned</u>			
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicant: Lester F. LUDWIG, et al.					
		Filing Date: November 1, 2000	Group: Not Yet Assigned	2152			
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
		5,475,421	12/12/95	Palmer et al.			
		5,485,504	1/16/96	Ohnsorge			
		5,491,695	2/13/96	Meagher et al.			
		5,506,954	4/9/96	Arshi et al.			
		5,515,491	5/7/96	Bates et al.			
		5,526,024	6/11/96	Gaglianello et al.			
		5,550,966	8/27/96	Drake et al.			
		5,553,222	9/3/96	Milne et al.			
		5,561,736	10/1/96	Moore et al.			
		5,565,910	10/15/96	Rowse et al.			
		5,581,702	12/3/96	McArdle			
		5,590,128	12/31/96	Maloney, et al.			
		5,594,495	1/14/97	Palmer et al.			
		5,602,580	2/11/97	Tseng			
		5,608,653	3/4/97	Palmer et al.			
		5,689,553	11/18/97	Ahuja et al.			
		5,864,844	1/99	James et al.	707	4	
FOREIGN PATENT DOCUMENTS							
		Document	Date	Country	Class	Sub-class	Translation Yes/No
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		WATABE et al., "A Distributed Multiparty Desktop Conferencing System and Its Architecture," IEEE, 1991.					
		WATABE et al., "Distributed Desktop Conferencing System with Multiuser Multimedia Interface," IEEE, 1991.					
		WEISS, Desk Top Video Conferencing - An Important Feature of Future Visual, SIEMENS AG - Munich - West Germany.					
		ZELLWEGER et al., "An Overview of the Etherphone System and Its Applications," Computer Workstations Conference, 1988.					
EXAMINER:		DATE CONSIDERED: 7/6/03					
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication.							